

ANNUAL DRINKING WATER COMPLIANCE REPORT FOR 2006

prepared by the

Drinking Water Program
Municipal Facilities Division
Environmental Health Section
North Dakota Department of Health

September 2007

INTRODUCTION

This Annual Compliance Report has been developed to meet the requirement of section 1414 of the 1996 Amendments to the Safe Drinking Water Act (SDWA). The time period covered in this report is January 1, 2006 through December 31, 2006.

The Drinking Water Program: An Overview

The Environmental Protection Agency (EPA) established the Public Water System Supervision (PWSS) Program under the authority of the 1974 SDWA. Under the SDWA and the 1986 Amendments, EPA sets national limits on contaminant levels in drinking water to ensure that the water is safe for human consumption. These limits are known as Maximum Contaminant Levels (MCLs). For some regulations, EPA establishes treatment techniques in lieu of an MCL to control unacceptable levels of contaminants in water. The Agency also regulates how often public water systems (PWSs) monitor their water for contaminants and report the monitoring results to the States or EPA. Generally, the larger the population served by a water system, the more frequent the monitoring and reporting (M/R) requirements. In addition, EPA requires PWSs to monitor for unregulated contaminants to provide data for future regulatory development. Finally, EPA requires PWSs to notify the public when they have violated these regulations. The 1996 Amendments to the SDWA require public notification to include a clear and understandable explanation of the nature of the violation, its potential adverse health effects, steps that the PWS is undertaking to correct the violation and the possibility of alternative water supplies during the violation.

The SDWA applies to the 50 States, the District of Columbia, Indian Lands, Puerto Rico, the Virgin Islands, American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and the Republic of Palau.

The SDWA allows States and Territories to seek EPA approval to administer their own PWSS Programs. The authority to run a PWSS Program is called primacy. To receive primacy, States must meet certain requirements laid out in the SDWA and the regulations, including the adoption of

drinking water regulations that are at least as stringent as the Federal regulations and a demonstration that they can enforce the program requirements. Of the 57 States and Territories, all but Wyoming and the District of Columbia have primacy. The EPA Regional Offices administer the PWSS Programs within these two jurisdictions.

The 1986 SDWA Amendments gave Indian Tribes the right to apply for and receive primacy. To receive primacy, a Tribe must meet the same requirements as a State. To date, no Tribes have been granted primacy. Currently, EPA administers PWSS Programs on all Indian lands.

Annual State PWS Report

An automated database called the Safe Drinking Water Information System (SDWIS) has been developed by the EPA to store drinking water information. Primacy States submit data to the federal version of SDWIS (SDWIS/FED) on a quarterly basis. Data include PWS inventory statistics, the incidence of MCLs, Major Monitoring, and Treatment Technique violations, and the enforcement actions taken against violators. The annual compliance report that States are required to submit to EPA will provide a total annual representation of the numbers of violations for each of the four categories listed in section 1414 (c)(3) of the SDWA reauthorization. These four categories are: MCLs, treatment techniques, variances and exemptions, and significant monitoring violations. The EPA Regional Offices report the information for Wyoming, the District of Columbia, and all Indian Lands. Regional offices also report Federal enforcement actions taken. EPA stores this data in SDWIS/FED. This report is based largely on data retrieved from SDWIS/FED.

Public Water System

A Public Water System (PWS) is defined as a system that provides water via piping or other constructed conveyances for human consumption to at least 15 service connections or serves an average of at least 25 people for at least 60 days each year. There are three types of PWSs. PWSs can be community (such as towns), nontransient noncommunity (such as schools or factories), or transient noncommunity systems (such as rest stops or parks). For this report, when the acronym “PWS” is used, it means systems of all types unless specified otherwise.

In North Dakota in 2006, 320 systems were classified as Community Water Systems (CWSs), 24 as Nontransient Noncommunity Water Systems (NTNCWSs), and 161 as Transient Noncommunity Water Systems (TNCWSs) for a total of 505 PWSs.

2006 SDWA Violations

The following tables depict SDWA violations incurred by North Dakota PWSs in calendar year 2006 and include violations that cross calendar year 2006 (i.e., violations determined in 2007 based on 2006 monitoring data). During 2006, a total of 138 major drinking water violations and 37 public notification violations were issued. 95 out of 505 systems incurred these violations in North Dakota for 2006. EPA requires the reporting of these major drinking water violations in the Annual Compliance Report.

In addition to the major violations discussed above, the State of North Dakota issued 11 minor drinking water violations and 2 accompanying public notification violations during 2006. While EPA does not require the reporting of these minor drinking water violations in the Annual Compliance Report, the State of North Dakota does include them throughout the report for public information. Overall, 101 out of 505 systems incurred major and/or minor drinking water violations during 2006.

Availability of Annual Compliance Report (ACR)

A legal notice stating the availability of North Dakota's 2006 ACR was published in six of the state's major newspapers. A press release was also sent to all fifty-three county newspapers. The ND Drinking Water Program will provide a summary of this report to all inquiries. North Dakota's State Report is available by contacting the North Dakota Department of Health, Division of Municipal Facilities, 918 E Divide Ave-3rd Floor, Bismarck, ND 58501-1947, Attention: LeeAnn Tillotson (701)328.5293 (phone), (701)328.5200 (fax), or ltillots@nd.gov (e-mail).

State: North Dakota

Reporting Interval:

January 2006 - December 2006

	MCL/ MRDL (mg/L) ¹	MCLs/MRDLs		Treatment Techniques		Significant Monitoring/Reporting	
		Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations
Organic Contaminants							
1,1,1-Trichloroethane	0.2	0	0			0	0
1,1,2-Trichloroethane	0.005	0	0			0	0
1,1-Dichloroethylene	0.007	0	0			0	0
1,2,4-Trichlorobenzene	0.07	0	0			0	0
1,2-Dibromo-3-chloropropane (DBCP)	0.0002	0	0			0	0
1,2-Dichloroethane	0.005	0	0			0	0
1,2-Dichloropropane	0.005	0	0			0	0
2,3,7,8-TCDD (Dioxin)	3x10 ⁻⁸	0	0			0	0
2,4,5-TP	0.05	0	0			0	0
2,4-D	0.07	0	0			0	0
Acrylamide				0	0		
Alachlor	0.002	0	0			0	0
Atrazine	0.003	0	0			0	0
Benzene	0.005	0	0			0	0
Benzo[a]pyrene	0.0002	0	0			0	0
Carbofuran	0.04	0	0			0	0
Carbon tetrachloride	0.005	0	0			0	0

State: North Dakota

Reporting Interval:

January 2006 - December 2006

	MCL/ MRDL (mg/L) ¹	MCLs/MRDLs		Treatment Techniques		Significant Monitoring/Reporting	
		Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations
Chlorobenzene	0.1	0	0			0	0
Chlordane	0.002	0	0			0	0
cis-1,2-Dichloroethylene	0.07	0	0			0	0
Dalapon	0.2	0	0			0	0
Di(2-ethylhexyl)adipate	0.4	0	0			0	0
Di(2-ethylhexyl)phthalate	0.006	0	0			0	0
Dichloromethane	0.005	0	0			0	0
Dinoseb	0.007	0	0			0	0
Diquat	0.02	0	0			0	0
Endothall	0.1	0	0			0	0
Endrin	0.002	0	0			0	0
Epichlorohydrin				0	0		
Ethylbenzene	0.7	0	0			0	0
Ethylene dibromide	0.00005	0	0			0	0
Glyphosate	0.7	0	0			0	0
Heptachlor	0.0004	0	0			0	0
Heptachlor epoxide	0.0002	0	0			0	0
Hexachlorobenzene	0.001	0	0			0	0
Hexachlorocyclopentadiene	0.05	0	0			0	0

State: North Dakota

Reporting Interval:

January 2006 - December 2006

	MCL/ MRDL (mg/L) ¹	MCLs/MRDLs		Treatment Techniques		Significant Monitoring/Reporting	
		Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations
Lindane	0.0002	0	0			0	0
Methoxychlor	0.04	0	0			0	0
Monochlorobenzene	0.1	0	0			0	0
o-Dichlorobenzene	0.6	0	0			0	0
Oxamyl (Vydate)	0.2	0	0			0	0
para-Dichlorobenzene	0.075	0	0			0	0
Pentachlorophenol	0.001	0	0			0	0
Picloram	0.5	0	0			0	0
Simazine	0.004	0	0			0	0
Styrene	0.1	0	0			0	0
Tetrachloroethylene	0.005	0	0			0	0
Toluene	1	0	0			0	0
Total polychlorinated biphenyls	0.0005	0	0			0	0
Toxaphene	0.003	0	0			0	0
trans-1,2-Dichloroethylene	0.1	0	0			0	0
Trichloroethylene	0.005	0	0			0	0
Vinyl chloride	0.002	0	0			0	0
Xylenes (total)	10	0	0			0	0

State: North Dakota

Reporting Interval:

January 2006 - December 2006

	MCL/ MRDL (mg/L) ¹	MCLs/MRDLs		Treatment Techniques		Significant Monitoring/Reporting	
		Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations
Inorganic Contaminants							
Antimony	0.006	0	0			0	0
Arsenic	0.05	0	0			0	0
Asbestos	7 million fibers/L ≤ 10 µm long	0	0			0	0
Barium	2	0	0			0	0
Beryllium	0.004	0	0			0	0
Cadmium	0.005	0	0			0	0
Chromium	0.1	0	0			0	0
Cyanide (as free cyanide)	0.2	0	0			0	0
Fluoride	4.0	4	1			0	0
Mercury	0.002	0	0			0	0
Nitrate	10 (as Nitrogen)	0	0			0	0
Nitrite	1 (as Nitrogen)	0	0			0	0
Selenium	0.05	0	0			0	0

State: North Dakota

Reporting Interval:

January 2006 - December 2006

	MCL/ MRDL (mg/L) ¹	MCLs/MRDLs		Treatment Techniques		Significant Monitoring/Reporting	
		Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations
Thallium	0.002	0	0			0	0
Total nitrate and nitrite	10 (as Nitrogen)	0	0			1	1
Subtotal		4	1			1	1
<p>Note: Although a PWS may be out of compliance with more than one contaminant or violation type, when calculating totals, it is counted no more than once within the population being totaled. So, the sum of ‘NUMBER OF PWS’s IN VIOLATION’, over the various violation types or contaminants, may not add up to the total number of violations.</p>							

State: North Dakota

Reporting Interval:

January 2006 - December 2006

	MCL/ MRDL (mg/L) ¹	MCLs/MRDLs		Treatment Techniques		Significant Monitoring/Reporting	
		Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations
Radionuclide MCLs							
Gross alpha	15 pCi/L	0	0			0	0
Radium-226 and radium-228	5 pCi/L	0	0			0	0
Gross beta	4 mrem/yr	0	0			0	0
Uranium	30ug/l	0	0			0	0
Subtotal		0	0			0	0

State: North Dakota

Reporting Interval:

January 2006 - December 2006

	MCL/ MRDL (mg/L) ¹	MCLs/MRDLs		Treatment Techniques		Significant Monitoring/Reporting	
		Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations
Total Coliform Rule							
Acute MCL violation	Presence	2	2				
Non-acute MCL violation	Presence	22	17				
Major routine and follow up monitoring						67	58
Sanitary survey						0	0
Subtotal		24	19			67	58
<p>Note: Although a PWS may be out of compliance with more than one contaminant or violation type, when calculating totals, it is counted no more than once within the population being totaled. So, the sum of 'NUMBER OF PWS's IN VIOLATION', over the various violation types or contaminants, may not add up to the total number of violations.</p>							
Minor routine and follow up monitoring NOTE: EPA does not require minor monitoring violations to be counted for the ACR						3	3

State: North Dakota

Reporting Interval:

January 2006 - December 2006

	MCL/ MRDL (mg/L) ¹	MCLs/MRDLs		Treatment Techniques		Significant Monitoring/Reporting	
		Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations
Surface Water Treatment Rule (SDWA 1993)							
Filtered systems							
Monitoring, routine/repeat						0	0
Treatment techniques				0	0		
Unfiltered systems							
Monitoring, routine/repeat							
Failure to filter							
Subtotal				0	0	0	0
Long Term 1 Enhanced Surface Water Treatment Rule (LT1ESWTR)							
Filtered systems							
Monitoring, routine/repeat						0	0
Treatment techniques				0	0		
Unfiltered systems							
Monitoring, routine/repeat							
Failure to filter							
Subtotal				0	0	0	0

State: North Dakota

Reporting Interval:

January 2006 - December 2006

	MCL/ MRDL (mg/L) ¹	MCLs/MRDLs		Treatment Techniques		Significant Monitoring/Reporting	
		Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations
LT1ESWTR Failure to Monitor Minor NOTE: EPA does not require minor monitoring violations to be counted for the ACR						1	1

State: North Dakota

Reporting Interval:

January 2006 - December 2006

	MCL/ MRDL (mg/L) ¹	MCLs/MRDLs		Treatment Techniques		Significant Monitoring/Reporting	
		Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations
Surface Water Treatment Rule (SDWA 1993)							
Record keeping for Ind. Filter						0	0
Failure to Produce Filter Assessment/ Failure to Produce CPE						0	0
Failure to Profile/Consult						0	0
Failure to Monitor/Routine, Major						0	0
Single Combined Filter Effluent				0	0		
Monthly Combined Filter Effluent				0	0		
Uncovered Storage Facility				0	0		
Subtotal				0	0	0	0

State: North Dakota

Reporting Interval:

January 2006 - December 2006

	MCL/ MRDL (mg/L) ¹	MCLs/MRDLs		Treatment Techniques		Significant Monitoring/Reporting	
		Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations
Long Term 1 Enhanced Surface Water Treatment Rule							
Record keeping for Ind. Filter						0	0
Failure to Produce Filter Assessment/ Failure to Produce CPE						0	0
Failure to Profile/Consult						0	0
Failure to Monitor Routine, Major						0	0
Single combined Filter Effluent				0	0		
Monthly Combined Filter Effluent				0	0		
Uncovered Storage Facility				0	0		
Subtotal				0	0	0	0

State: North Dakota

Reporting Interval:

January 2006 - December 2006

	MCL/ MRDL (mg/L) ¹	MCLs/MRDLs		Treatment Techniques		Significant Monitoring/Reporting	
		Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations
Filter Backwash Recycle Rule							
Failure to Properly Recycle				0	0		
Recordkeeping						0	0
Subtotal				0	0	0	0
Stage 1 Disinfectants and Disinfection By-products Rule							
Haloacetic Acids	0.060	5	2			0	0
Total Trihalomethane	0.080	15	7			0	0
Total Organic Carbon						0	0
Alkalinity				0	0	0	0
Chlorine/Chloramine	MRDL=4.0	0	0			15	12
Bromate/Bromide	0.01	0	0			0	0
Subtotal		20	9			15	12

State: North Dakota

Reporting Interval:

January 2006 - December 2006

	MCL/ MRDL (mg/L) ¹	MCLs/MRDLs		Treatment Techniques		Significant Monitoring/Reporting	
		Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations
Lead and Copper Rule							
Initial lead and copper tap M/R						0	0
Follow-up or routine lead and copper tap M/R						2	2
Treatment installation				0	0		
Public education				0	0		
Subtotal				0	0	2	2
<p>Note: Although a PWS may be out of compliance with more than one contaminant or violation type, when calculating totals, it is counted no more than once within the population being totaled. So, the sum of 'NUMBER OF PWS'S IN VIOLATION', over the various violation types or contaminants, may not add up to the total.</p>							
Consumer Confidence Report Rule							
CCR Report Violation						2	2
Subtotal						2	2

State: North Dakota

Reporting Interval:

January 2006 - December 2006

	MCL/ MRDL (mg/L) ¹	MCLs/MRDLs		Treatment Techniques		Significant Monitoring/Reporting	
		Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations
CCR Adequacy/Availability/ Content Violation (MINOR Violation) NOTE: EPA does not require reporting of minor violations of Adequacy/Availability/ Content to be included in the ACR.						7	7
Public Notification Rule							
Public Notice Violations						38	29
Subtotal						38	29

State: North Dakota

Reporting Interval:

January 2006 - December 2006

	MCL/ MRDL (mg/L)¹	MCLs/MRDLs		Treatment Techniques		Significant Monitoring/Reporting	
		Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations
Public Notice Violations for MINOR and/or ON-GOING Violations NOTE: EPA does not require Public Notice Violations pertaining to minor monitoring or on-going violations to be counted for the ACR						2	2

1. Values are in milligrams per liter (mg/L), unless otherwise specified.

Definitions for Summary of Violations Table

The following definitions apply to the Summary of Violations Table.

Consumer Confidence Report (CCR) Rule: The CCR Rule requires all community water systems to issue annual drinking water quality reports to their customers. States are to report two categories of violations:

CCR Report Violation: A violation that exists when a PWS fails to produce and deliver the report to the public and provide a copy to the State by the annual due date or the State determines the report was grossly inadequate and must be regenerated and delivered providing a copy to the State.

CCR Adequacy/Availability/Content Violation: A violation where the State determines the report is deficient in language, content, and/or meeting availability requirements or if a community public water system fails to submit a completed certification form.

Stage 1 Disinfectants/Disinfection By-products (D/DBP) Rule: The D/DBP Rule currently requires community water systems supplied by surface water sources with a population serving greater than 10,000 to test for the regulated by-products potentially produced from the use of the disinfectants ozone, chlorine dioxide and chlorine.

Filter Backwash Recycle Rule (FBRR): The Filter Backwash Recycle Rule requires monitoring/reporting and treatment techniques for those public water systems that use surface water or ground water under the influence of surface water, practice conventional or direct filtration, and recycle spent filter backwash, thickener supernatant, or liquids from de-watering processes.

Filtered Systems: Water systems that have installed filtration treatment [40 CFR 141, Subpart H].

Inorganic Contaminants: Non-carbon-based compounds such as metals, nitrates, and asbestos. These contaminants are naturally-occurring in some water, but can get into water through farming, chemical manufacturing, and other human activities. EPA has established MCLs for 15 inorganic contaminants [40 CFR 141.62].

Long Term 1 Enhanced Surface Water Treatment Rule (LT1ESWTR): The Interim Enhanced Surface Water Treatment Rule requires monitoring and treatment to improve control of microbial pathogens, specifically the protozoan cryptosporidium, in drinking water and to address risk trade-offs with disinfection by-products.

Lead and Copper Rule: This rule established national limits on lead and copper in drinking water [40 CFR 141.80-91]. Lead and copper corrosion pose various health risks when ingested at any level, and can enter drinking water from household pipes and plumbing fixtures. States report violations of the Lead and Copper Rule in the following six categories:

Initial lead and copper tap M/R: A violation where a system did not meet initial lead and copper testing requirements, or failed to report the results of those tests to the State.

Follow-up or routine lead and copper tap M/R: A violation where a system did not meet follow-up or routine lead and copper tap testing requirements, or

failed to report the results.

Treatment installation: Violations for a failure to install optimal corrosion control treatment or source water treatment which would reduce lead and copper levels in water at the tap. [One number is to be reported for the sum of violations in both categories].

Lead service line replacement: A violation for a system's failure to replace lead service lines on the schedule required by the regulation.

Public education: A violation where a system did not provide required public education about reducing or avoiding lead intake from water.

Maximum Contaminant Level (MCL): The highest amount of a contaminant that EPA allows in drinking water. MCLs ensure that drinking water does not pose either a short-term or long-term health risk. MCLs are defined in milligrams per liter (parts per million) unless otherwise specified.

Maximum Residual Disinfectant Level (MRDL): The EPA sets national limits on residual disinfectant levels in drinking water to reduce the risk of exposure to disinfectant byproducts formed, when public water systems add chemical disinfectant for either primary or residual treatment. These limits are known as Maximum Residual Disinfectant Levels.

Monitoring: EPA specifies which water testing methods the water systems must use, and sets schedules for the frequency of testing. A water system that does not follow EPA's schedule or methodology is in violation [40 CFR 141].

States must report monitoring violations that are significant as determined by the EPA Administrator and in consultation with the States. For purposes of this report, significant monitoring violations are major violations and they occur when no samples are taken or no results are reported during a compliance period. A major monitoring violation for the surface water treatment rule occurs when at least 90% of the required samples are not taken or results are not reported during the compliance period.

Organic Contaminants: Carbon-based compounds, such as industrial solvents and pesticides. These contaminants generally get into water through runoff from cropland or discharge from factories. EPA has set legal limits on 54 organic contaminants that are to be reported [40 CFR 141.61].

Public Notification Rule: This rule requires a public water system to notify the public anytime the system violates national primary drinking water regulations or has other situations posing a risk to public health. Note: The State of North Dakota began issuing Code 75 Public Notice violations 10/01/2002. Prior to that date Code 06 violations were issued. Code 75 violations link the Public Notification Violation to a specific rule. Code 06 violations do not link the Public Notification Violation to a specific rule.

Radionuclides: Radioactive particles which can occur naturally in water or result from human activity. EPA has set legal limits on four types of radionuclides: radium-226, radium-228, gross alpha, and beta particle/photon radioactivity [40 CFR 141]. Violations for these contaminants are to be reported using the following three categories:

Gross alpha: A violation for alpha radiation above the MCL of 15 picocuries/liter. Gross alpha includes radium-226 but excludes radon and uranium.

Combined radium-226 and radium-228: A violation for combined radiation from these two isotopes above the MCL of 5 pCi/L.

Gross beta: A violation for beta particle and photon radioactivity from man-made radionuclides above 4 millirem/year.

Uranium: A violation for uranium above the MCL of 30 ug/l.

Reporting Interval: The reporting interval for violations to be included in the Annual Compliance Report, which is to be submitted to EPA by September 15, 2007, is from January 1, 2006 through December 31, 2006.

SDWIS Code: Specific numeric codes from the Safe Drinking Water Information System (SDWIS) have been assigned to each violation type included in this report. The violations to be reported include exceeding contaminant MCLs, failure to comply with treatment requirements, and failure to meet monitoring and reporting requirements.

Surface Water Treatment Rule (SDWA 1993): The Surface Water Treatment Rule establishes criteria under which water systems supplied by surface water sources, or ground water sources under the direct influence of surface water, must filter and disinfect their water [40 CFR 141, Subpart H]. Violations of the Surface Water Treatment Rule are to be reported for the following four categories:

Monitoring, routine/repeat (for filtered systems): A violation for a system's failure to carry out required tests, or to report the results of those tests.

Treatment techniques (for filtered systems): A violation for a system's failure to properly treat its water.

Monitoring, routine/repeat (for unfiltered systems): A violation for a system's failure to carry out required water tests, or to report the results of those tests.

Failure to filter (for unfiltered systems): A violation for system's failure to properly treat its water. Data for this violation code will be supplied to the States by EPA.

Total Coliform Rule (TCR): The Total Coliform Rule establishes regulations for microbiological contaminants in drinking water. These contaminants can cause short-term health problems. If no samples are collected during one month compliance period, a significant monitoring violation occurs. States are to report four categories of violations:

Acute MCL violation: A violation where the system found fecal coliform or E. coli, potentially harmful bacteria, in its water, thereby violating the rule.

Non-acute MCL violation: A violation where the system found total coliform in samples of its water at a frequency or at a level that violates the rule. For systems collecting fewer than 40 samples per month, more than one positive sample for total coliform is a violation. For systems collecting 40 or more samples per month, more than 5% of the samples positive for total coliform is a violation.

Major routine and follow-up monitoring: A violation where a system did not perform any monitoring. One number is reported for the sum of violations in these two categories.

Sanitary Survey: A major monitoring violation where a system fails to collect 5 routine monthly microbiological samples if a sanitary survey has not been performed during the previous 5 years.

Treatment Techniques: Treatment or other measures that EPA requires instead of an MCL for contaminants that laboratories cannot adequately measure. Failure to meet operational and system requirements under the Surface Water Treatment Rule, the Lead and Copper Rule, and the Phase II Rule (Acrylamide and Epichlorohydrin) have been included in this category of violation for the purposes of this report.

Unfiltered Systems: Water systems (using surface water or groundwater under the direct influence of surface water) that are not required to filter their water prior to disinfection due to source and site-specific conditions [40 CFR, Subpart H].

Violation: A failure to meet any state or federal drinking water regulation.

VARIANCES AND EXEMPTIONS

Exemptions were granted for the following systems:

An exemption from compliance with the Long Term 1 Enhanced Surface Water Treatment Rule (LT1ESWTR) was granted to:

- The City of Riverdale through December 31, 2006 due to a proposal to upgrade the water treatment plant to comply with the LT1ESWTR. The City of Riverdale has met the requirements of LT1ESWTR prior to the expiration date of the exemption.

CONCLUSION

The vast majority of PWSs in North Dakota maintain an excellent SDWA compliance record. During 2006, 283 certificates of compliance were issued to operators and public water systems that maintained full compliance.

The following tables illustrate the high compliance rate (for calendar year 2006) maintained by North Dakota PWSs. It is the responsibility of each PWS under the SDWA to properly comply with all drinking water monitoring, reporting, MCL and treatment technique requirements.

Under the TCR, all PWSs are required to collect and submit a prescribed number of microbiological samples (based on population served) each month or quarter to a certified laboratory for analysis on an ongoing basis. Under the SWTR, PWSs that utilize surface water (currently 21 in North Dakota) are required to maintain finished water turbidity at or below certain target levels. Such systems are also required to maintain residual disinfectant concentrations at or above certain target levels (applies both to water entering and within the distribution system).

As it is nationwide, North Dakota's predominant compliance problem is ensuring that all required microbiological samples are collected. The department will continue to work with the PWSs in the state to improve compliance.

	MCLs		Treatment Techniques		Significant Monitoring/Reporting	
	Total Number of Systems Required to Monitor	Percentage of Systems with <u>No</u> Violations	Total Number of Systems Required to Monitor	Percentage of Systems with <u>No</u> Violations	Total Number of Systems Required to Monitor	Percentage of Systems with <u>No</u> Violations
Organic Contaminants						
Community Water Systems (CWS)	320	100%	320	100%	320	100%
Nontransient Noncommunity Water Systems (NTNCWS)	24	100%	24	100%	24	100%
Transient Noncommunity Water Systems (TNCWS)	0				0	
Inorganic Contaminants						
CWS	320	99.69%			320	100%
NTNCWS	24	100%			24	100%
TNCWS	161	100%			161	99.38%

	MCLs/MRDLs		Treatment Techniques		Significant Monitoring/Reporting	
	Total Number of Systems Required to Monitor	Percentage of Systems with <u>No</u> Violations	Total Number of Systems Required to Monitor	Percentage of Systems with <u>No</u> Violations	Total Number of Systems Required to Monitor	Percentage of Systems with <u>No</u> Violations
Radionuclides						
CWS	320	100%			320	100%
NTNCWS	0				0	
TNCWS	0				0	
Total Coliform Rule						
CWS	320	95.9%			320	93.75%
NTNCWS	24	100%			24	100%
TNCWS	161	96.9%			161	76.4%
Surface Water Treatment Rule¹ SDWA 1993						
CWS			1	100%	1	100%
NTNCWS			0		0	
TNCWS			0		0	
Long Term 1 Enhanced Surface Water Treatment Rule						
CWS			15	100%	15	100%
NTNCWS			5	100%	5	100%
TNCWS			0		0	
Stage 1 Disinfectants/Disinfection By-products Rule²						
CWS	162	95.68%	16	93.75%	162	92.5%
NTNCWS	10	90.0%	5	100%	10	100%
TNCWS						

	MCLs		Treatment Techniques		Significant Monitoring/Reporting	
	Total Number of Systems Required to Monitor	Percentage of Systems with <u>No</u> Violations	Total Number of Systems Required to Monitor	Percentage of Systems with <u>No</u> Violations	Total Number of Systems Required to Provide Report	Percentage of Systems with <u>No</u> Violations
Lead and Copper Rule						
CWS			320	100%	320	99.69%
NTNCWS			24	100%	24	100%
TNCWS			0		0	
	MCLs		Treatment Techniques		Significant Monitoring/Reporting	
	Total Number of Systems Required to Monitor	Percentage of Systems with <u>No</u> Violations	Total Number of Systems Required to Monitor	Percentage of Systems with <u>No</u> Violations	Total Number of Systems Required to Provide Report	Percentage of Systems with <u>No</u> Violations
Consumer Confidence Rule						
CWS					320	99.38%
NTNCWS					0	
TNCWS					0	

1. Only those systems that use surface water are required to monitor under and comply with the SWTR.

LIST OF SYSTEMS WITH VIOLATIONS IN 2006¹

Organic Contaminants

No violations for organic contaminants were issued in 2006.

Radionuclide Contaminants

No violations for radionuclide contaminants were issued in 2006.

Inorganic Contaminant Violations

Community and Noncommunity Water Systems

Fluoride

Maximum Contaminant Level Violation (MCL), Average

Lakeshore Estates (Mercer)- 4

Nitrate/Nitrite

Failure to Monitor/Report Violations

Lidgerwood Park (Richland)

Lead and Copper Rule Violations

Community and Nontransient Noncommunity Water Systems

Follow-up or Routine Tap Monitor/Report Violations

Almont, City of

Underwood, City of

Microbiological Violations Community Water Systems¹

Acute Maximum Contaminant Level Violations (MCLA)

Rolette, City of

Maximum Contaminant Level Violations (MCL)

Country Acres Water Co - 2

Hillsboro, City of

Karlsruhe, City of

Kathryn, City of

Lake Shure Home Owners Association (Cass)

Langdon Rural Water District

Leeds, City of

McKenzie County Rural Water - 2

Robinson, City of

Rolette, City of

Sleepy Hollow Water Company (Cass)

West Fargo, City of

Failure to Monitor Major and Follow-Up Monitoring Violations (FMma and MaR)Microbiological Violations

Almont, City of

Apple Creek Court (Burleigh)

Braddock, City of (Inactive)

Cleveland, City of

Enderlin, City of

Fradets Orchard Water System (Cass) - 2

Kensal, City of

Lake Shure Home Owners Association (Cass)

Litchville, City of

Maple River Hutterian Association (Dickey) - 4

Mountain, City of

Newburg, City of

North Central of Barnes

Rock Lake, City of

Selfridge, City of

Strasburg, City of

Surrey, City of

Sykeston, City of

Wildrose, City of

Willowbank Colony (LaMoure) - 2

Failure to Monitor Minor and Follow-Up Monitoring Violations Community Water Systems (FMmi and MiR) NOTE: EPA does not require minor monitoring violations to be counted for the ACR

McKenzie County Rural Water

Rolla, City of

Microbiological Violations

Noncommunity Water Systems

Acute Maximum Contaminant Level Violations (MCLA)

Tops Motel (Burleigh)

Maximum Contaminant Level Violations (MCL)

Carbury Recreation Area (Bottineau)

Knickerbocker Liquor Locker (Cass) - 2

Napoleon Livestock (Logan)

Tops Motel (Burleigh)

Wishek Livestock Market Café (McIntosh)- 3

Failure to Monitor Major and Follow-Up Monitoring Violations

(FMma and MaR) continued:

Arnegard Café (McKenzie)

Arnegard City Park (McKenzie)

Beaver Creek Rec Area (Emmons)

Beulah Bay Rec Area (Mercer)

Buffalo Trails Campground (Williams)- 2

Crappie Creek North (Grant)

Crappie Creek Rec Area (Grant)

Crossroads Restaurant (Dunn)

Crystal Springs Baptist Camp (Stutsman)

Downstream Campground (McLean)

Doyle Memorial State Park (McIntosh)

Fort Rice Bar & Grill -2 (Morton)

Garden Gate Golf Club (Inactive)

Geneseo Bar & Café - 2 (Sargent)

Grandview Motel - 2 (Williams)

Heart Butte Farmers Union Camp (Grant)

Lake Sakakawea State Park (Mercer)

Lake Tschida Downstream Campground (Grant)

LaMoure County Memorial Park (LaMoure)

Larson's Drive Inn (Grand Forks)

Lewis & Clark State Park (Williams)

Lidgerwood Park (Richland)

Long X Saloon (McKenzie)

Medicine Hole Golf Course (Dunn)

Mouse River Farmers Union Camp (McHenry)

North Side Trailer Area # 1 (Grant)

North Side Trailer Area # 2 (Grant)

Northshore Concessions (Grant)

PDQ Club (McKenzie)

Red Willow Bible Camp (Griggs)

Rimrock Rec Area (Grant)

Rimrock Rec at Highway 49 (Grant)

Schatz's Point (Grant)

Sully's Hill Nat'l Game Preserve (Benson)

The Big D (Kidder)

Tioga Golf and Country Club (Williams)

VFW Club (Inactive)

Watford City Golf Course (Inactive)

Microbiological Violations

Noncommunity Water Systems

Failure to Monitor Minor and Follow-Up Monitoring Violations (FMmi and MiR) NOTE: EPA does not require minor monitoring violations to be counted for the Annual Compliance Report.

PDQ Club (McKenzie)

Surface Water Treatment Rule Violations (SDWA 1993)

No violations of the Surface Water Treatment Rule were issued during 2006.

Long-Term 1 Interim Enhanced Surface Water Treatment Rule Violations Community and Noncommunity Water Systems

Failure to Monitor/Report Minor (IESWTR)

**NOTE: EPA does not require minor monitoring/reporting violations
to be counted for the Annual Compliance Report.**

Washburn, City of

Stage 1 Disinfection By-Products Rule Violations

Chlorine

Failure to Monitor Major Violations

Braddock, City of (Inactive) - 2

Brooktree Wells Inc

Country Acres MHP (Ward)

Karlsruhe, City of - 2

Marmarth, City of

Meadowbrook Park Road & Water Inc. () (Inactive) - 2

Plaza, City of

Rolla, City of

Selfridge, City of

Strasburg, City of

Woodworth, City of

Wyndmere, City of

Stage 1 Disinfection By-Products Rule Violations- continued

Total Organic Carbon (TOC)

Inadequate DBP Precursor Removal Treatment Technique

Riverdale, City of - 3

Total Haloacetic Acids (HAA5)

Maximum Contaminant Level Violations (MCL)

Burlington, City of

Deering City of - 4

Stage 1 Disinfection By-Products Rule Violations-continued

Total Trihalomethanes (TTHM)

Maximum Contaminant Level Violations (MCL)

Burlington, City of - 4
Deering, City of
Garrison, City of - 2
Prairie School (Billings) - 3
Solen, City of - 3
Upper Souris WUA -System I
Williston, City of

Public Notification Rule Violations Community Water Systems

Almont, City of
Deering, City of
Fradets Orchard Water System (Cass)- 2
Maple River Hutterian Association (Dickey) - 4
McKenzie County Rural Water
Rolette, City of
Selfridge, City of
Solen, City of
Willowbank Colony (LaMoure) - 2
Woodworth, City of

NOTE: The following additional Community Public Notification Violations pertain to minor originating violations. EPA does not require minor monitoring/reporting violations to be counted for the Annual Compliance Report.

McKenzie County Water

Public Notification Rule Violations Noncommunity Water Systems

Arnegard Café
Arnegard City Park
Beulah Bay Rec Area
Buffalo Trails Campground - 2
Carbury Recreation Area
Crossroads Restaurant
Fort Rice Bar & Grill
Garden Gate Golf Club
Geneseo Bar & Café -2
Grandview Motel - 2
Lake Sakakawea State Park
LaMoure County Memorial Park
Larson's Drive Inn
Lewis & Clark State Park
Long X Saloon
Meadowbrook Park Road & Water (Inactive)
PDQ Club (McKenzie)
Tioga Golf and Country Club
Tops Motel

NOTE: The following additional Noncommunity Public Notification Violations pertain to minor originating violations. EPA does not require minor monitoring/reporting violations to be counted for the Annual Compliance Report.

PDQ Club (McKenzie)

Consumer Confidence Rule Violations Community Water Systems

Failure to Submit a Consumer Confidence Report

Forbes, City of
Meadowbrook Park Road & Water Inc ((Inactive)

Consumer Confidence Rule Violations Community Water Systems-continued

Adequacy/Availability/Content (Minor Violation)

NOTE: EPA does not require minor monitoring/reporting violations to be counted for the Annual Compliance Report.

Cando, City of
Colfax, City of
Fradets Orchard Water System (Cass)
Minot Mobile Estates (Ward)
Monango, City of
Tolna, City of
Willowbank Colony (LaMoure)

1. Multiple violations within a specified category are represented by a number following the system name (i.e., "Country Acres Water Company- 2" under Microbiological Violations, Community Water Systems, MCL Violations means Country Acres Water Company incurred 2 MCL violations during the reporting period). Counties are in parentheses.